

C L A I M S

1.- Cold starting system for high - speed direct -
injection diesel engines specially conceived for motor
vehicle engines based on the use of electrical
5 resistances, and more specifically in the use of heating
elements in the form of a ribbon and serpentine shaped
with uniform spacing between the loops of serpentine,
where the faces of the ribbon are parallel to the intake
conduit axis for the passage of air to the engine so that
10 the edges of said ribbon are perpendicular to the
direction of air flow, characterised in that the
resistance (7) is mounted on a support (1) provided with
means of fastening to the engine, being established in
diametrically opposed areas of the orifice (3) for the
15 passage of air of said support (1) groups of recesses (4)
of arched semicircular configuration, with an interior
nipple (5) defining an arched recess wherein the
corresponding inflection (6) of the resistance (7) is
coupled with interposition of a ceramic insulator (8).

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2.- Cold starting system for high - speed direct -
injection diesel engines according to claim 1,
characterised in that in one of the groups of recesses
(4) of the support (1) two special and outermost recesses
25 are established, one recess (9), blank, that houses in
its interior the corresponding extremity (10) of the
resistance (7) and that, through the absence of ceramic
insulator, establishes the connection to ground of this
resistance with the collaboration of a setscrew (12), a
30 rivet or the like, and the other (13), open to the
exterior (14), with an intermediate expansion (15) in
which a ceramic insulator (16) is established that
protects the connection, by means of welding, of the
other end (17) of the resistance to the end (19) of the
35 electricity supply cable (18) thereof.